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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,710	01/17/2002	Yasumichi Kuwayama	Q68136	4857

7590 07/22/2003

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EXAMINER
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NGUYEN, CHAU N

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 07/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant(s)

10/046,710

Applicant(s)

KUWAYAMA ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6 and 9 is/are rejected.
- 7) ☒ Claim(s) 3,4,7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Livshiz et al. (US 2001/0016459) in view of Sandrock (3,844,923).

Livshiz et al. discloses a structure comprising a wire including a conductor portion (30) and an insulating sheath (not shown), a terminal (Figs 1 and 6) including a substantially cylindrical wire connection portion, wherein the conductor portion is inserted in the wire connection portion, and the wire connection portion is pressed radially uniformly over an entire periphery of the wire connection portion and over an entire length of the wire connection portion (page 5, [0085]) so that the conductor portion is held in intimate contact with the inner peripheral surface of the wire connection portion, and the diameter of the wire connection portion is uniformly reduced over an entire periphery and an entire length of the wire connection portion.

Livshiz et al. does not specifically disclose the insulating sheath of the wire also being inserted in the wire connection portion so that the insulating sheath is held in intimate contact with the inner peripheral surface of the wire connection portion. Sandrock discloses a structure comprising a wire including a conductor portion and an insulating sheath, wherein the insulating sheath is inserted in a wire connection portion such that the insulating sheath is held in intimate contact with the inner peripheral surface of the wire connection portion. It would have been obvious to one skilled in the art to apply the teaching of Sandrock in the structure of Livshiz et al., by inserting the insulating sheath into the wire connection portion

or by providing the wire connection portion with a longer length to cover the insulating sheath of the wire then crimping the entire periphery and length of the wire connection portion, to prevent corrosive chemicals from penetrating into the interior surface of the wire connection portion. Noted that the modified structure of Livshiz et al. is a waterproofing structure (re claims 1 and 5).

Re claims 2 and 6, Sandroch discloses the wire connection portion including a smaller-diameter insertion hole for the conductor portion and a larger-diameter insertion hole for the insulating sheath, the smaller-diameter and larger-diameter holes being disposed coaxial relation to each other. It would have been obvious to one skilled in the art to modify the wire connection portion of Livshiz et al. with small and larger insertion holes as taught by Sandroch so that the larger-diameter insertion hole can be used to receive the insulating sheath of the wire.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Livshiz et al. in view of Sandroch as applied to claim 5 above, and further in view of Ikeno et al. (5,045,527).

Claim 9 additionally recites the pressing being effected by a rotary swaging machine. Ikeno et al. discloses an invention relating to pressing a cylindrical portion radially uniformly to reduce the diameter of the portion, wherein the

pressing is effected by a rotary swaging machine. It would have been obvious to one skilled in the art to use rotary swaging machine to radially uniformly compress the wire connection portion of Livshiz et al. since rotary swaging machine is one of well-known methods to provide a smooth, diameter-reduced and uniform wire as taught by Ikeno et al.

***Allowable Subject Matter***

5. Claims 3, 4, 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a structure comprising all the features as recited in the claims and in combination with a waterproof seal material or a waterproof seal member being arranged in an annular shape within the wire connection portion and an outer peripheral surface of the insulating sheath being held in intimate contact with one of the seal material and seal member (re claims 3 and 7).

***Response to Arguments***

7. Applicant's arguments with respect to claims 1 and 5 have been considered but are moot in view of the new ground(s) of rejection.

***Summary***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Communication*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305 3432 for regular communications and (703) 305 1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Chau N Nguyen  
Primary Examiner  
Art Unit 2831

CN  
July 17, 2003